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https://doi.org/10.1016/j.jaad.2018.11.027

Patient comfort and expectations for total body skin examinations: A cross-sectional study

To the Editor: Total body skin examinations (TBSEs) are cost-effective and reduce skin cancer–related mortality.[1] Patient discomfort with TBSEs is a barrier to care,[2,3] but few studies explore the factors contributing to patient comfort during TBSEs. We aimed to clarify patient expectations regarding TBSE preparation, the areas to be examined, and the presence of a chaperone.

Adults presenting for TBSEs at an academic dermatology clinic between May 2017 and December 2017 were eligible to participate in a 19-question, institutional review board–approved survey. The target number was 500 surveys, and collection was stopped once this goal was reached. Data analysis used summary statistics, *t* test, chi-square, analysis of variance, and logistic regression.

Table I compares responses between respondents who had or had not previously undergone a TBSE (n = 493). Of all respondents, 3% to 6% preferred a same-gender physician for examination of the head, limbs, nails, and trunk, while more preferred a same-gender physician for sensitive areas, including the buttocks/thighs (16%), breasts (20%), penis (21%), and vulva (32%). Compared with patients with a previous TBSE, those new to TBSE more often preferred a same-gender physician for examination of the buttocks/thighs (13% vs 25%, $P < .01$) and breasts (17% vs 30%, $P = .04$), but not for other areas.

Notably, 84% of respondents expected examination of the genital and breast skin in a TBSE, though this varied significantly by age, gender, ethnicity, previous TBSE, and family history of skin cancer. Of those who did not expect a dermatologist to examine genital and breast skin, 47% expected this examination to be performed by an obstetrician/gynecologist, 23% by a primary care physician, 4% by a urologist, and 26% by another type of physician.

When examined by a same-gender physician, both women and men were more comfortable without a chaperone than with a chaperone ($P = .01$); there was no difference in comfort between men and women when TBSE was performed by an opposite-gender physician with or without a chaperone ($P = .33$). Patients with a previous TBSE were more comfortable when examined by opposite-gender physicians, whether or not a chaperone was present ($P < .01$). Qualitative responses indicated that respondents prefer fewer people in the room during a TBSE.

This survey raises several important considerations. First, patients who have never undergone a TBSE report greater discomfort with an opposite-gender physician, especially for the examination of sensitive areas. Patients become more comfortable and exhibit reduced gender preferences after an initial TBSE. A discussion of patient expectations and education about the examination steps before the first TBSE may improve comfort. Second, many patients prefer not to have a chaperone in the room; balancing patient comfort with the legal necessity of providing a chaperone requires further consideration. Lastly, 1 in 6 patients did not expect a genital and breast skin examination by a dermatologist. It is important to know whether other specialists are routinely performing thorough skin examinations of these areas and whether they are comfortable diagnosing dermatologic conditions. Dermatologists should work closely with other specialists to ensure that important diagnoses of the genital and breast skin are not missed.

Limitations include an inability to assess demographic or clinical differences between participants and nonparticipants, and limited generalizability given that the study was conducted in a single academic institution.

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Table I. Comparison of participants according to previous TBSE experience

	No previous TBSE (n = 94)	Previous TBSE (n = 399)	*P* value
Age, y, n (%)			
18-20	0 (0)	2 (0)	<.01
21-29	9 (10)	17 (4)	
30-39	20 (21)	56 (14)	
40-49	13 (14)	37 (9)	
50-59	15 (16)	75 (19)	
60-69	12 (13)	124 (31)	
≥70	25 (27)	86 (22)	
Gender, n (%)			
Female	39 (42)	205 (52)	.11
Male	53 (58)	192 (48)	
Race/ethnicity, n (%)			
White	64 (69)	370 (93)	<.01
Hispanic	12 (13)	15 (4)	
Black or African American	12 (13)	4 (1)	
East Asian	2 (2)	2 (0.5)	
Southeast Asian	2 (2)	2 (0.5)	
Middle Eastern	1 (1)	2 (0.5)	
American Indian or Alaskan Native	0 (0)	1 (0)	
Native Hawaiian or Pacific Islander	0 (0)	1 (0)	
Medical characteristics, n (%)			
Previous skin cancer	12 (12)	169 (42)	<.01
Previous pre−skin cancer	18 (19)	206 (52)	<.01
Family history of skin cancer	19 (20)	189 (48)	<.01
Immunosuppression	6 (6)	25 (6)	.97
Expect TBSE during dermatology visit, n (%)	59 (63)	350 (89)	<.01
Comfort (scale of 1 to 5), mean ± SD			
Same gender, no chaperone	3.99 ± 1.30	4.26 ± 1.22	.07
Same gender, chaperone	3.77 ± 1.37	4.05 ± 1.30	.08
Opposite gender, no chaperone	3.27 ± 1.38	3.87 ± 1.29	<.01
Opposite gender, chaperone	3.22 ± 1.37	3.78 ± 1.35	<.01
Time expected, n (%)			
1-2 min	7 (8)	14 (4)	.15
2-5 min	19 (22)	87 (22)	
5-10 min	36 (41)	194 (50)	
>10 min	26 (30)	92 (24)	
Item(s) patients are expected to remove, n (%)			
Makeup	30 (33)	147 (38)	.39
Nail polish	22 (24)	102 (26)	.67
Watch	55 (61)	289 (74)	.01
Jewelry (bracelets, necklaces)	46 (51)	214 (55)	.49
Socks and shoes	83 (92)	386 (98)	<.01
Underwear (upper body)	61 (67)	304 (78)	.03
Underwear (lower body)	57 (64)	251 (65)	.86
Preference for same-gender physician, n (%)			
Scalp	4 (4)	13 (3)	.63
Eyes	3 (3)	13 (3)	>.99
Face and neck	3 (3)	13 (3)	.97
Ears	3 (3)	13 (3)	.97
Inside of mouth	4 (4)	14 (4)	.70
Chest, back, and abdomen	8 (9)	25 (6)	.42
Buttocks and inner thighs	23 (25)	50 (13)	<.01
Arms, legs, hands, and feet	4 (4)	15 (4)	.81
Fingernails and toenails	4 (4)	14 (4)	.71
Female breasts	13 (30)	39 (17)	.04
Male genitalia	15 (27)	41 (19)	.20
Female genitalia	14 (34)	62 (32)	.90

TBSE, Total body skin examination.

Funding sources: None.

Conflicts of interest: None disclosed.

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https://doi.org/10.1016/j.jaad.2018.11.046

Risk factors for acne development in the first 2 years after initiating masculinizing testosterone therapy among transgender men

To the Editor: Female-to-male transgender patients (herein referred to as transgender men) receive masculinizing doses of testosterone to induce virilization and suppress menstruation. Studies have shown that elevated androgen levels among transgender men have been associated with an increased incidence of acne.[1-5] Studies suggest that testosterone therapy increases the development of acne, though severe acne occurs only rarely.[3] Our study assessed the timing of acne onset relative to initiation of testosterone therapy in transgender men and the biologic, behavioral, and sociodemographic predictors of acne in this population.

Transgender men whose hormone therapy was managed at the Center for Transgender Medicine and Surgery at Boston Medical Center in Boston, Massachusetts, between January 1, 2010, and December 31, 2017, were identified; a total of 69 transgender men were identified. Following a systematic medical chart review, individuals were excluded if (1) they were under the age of 18 years or undergoing testosterone therapy for less than 2 years, (2) their medical records were incomplete, or (3) acne was present before testosterone therapy. The study was conducted with the remaining 55 transgender men.

A multivariate logistic regression was conducted to determine whether acne occurrence in this population is influenced by age at initiation of testosterone therapy, race, alcohol use, smoking status, body mass index, serum testosterone level, and/or blood pressure. The median serum testosterone level (630 ng/dL) was used to differentiate between higher and lower levels. All predictor variables were entered into the logistic regression model by using SAS software (version 9.3, SAS Institute, Inc, Cary, NC). Summary measures were reported as odds ratios (ORs).

Table I summarizes the sample demographics of the 55 transgender men. Per the inclusion criteria, no patient had a history of acne. Acne developed in 9% of the transgender men after 3 months and in 18% after 6 months. After 24 months, 38% of the subjects had developed acne at some point within the study period (as seen in Fig 1).

Multivariate logistic regression revealed that acne was significantly associated with serum testosterone levels higher than 630 ng/dL (OR, 8.137; 95% confidence interval [CI], 1.53-43.43; $P < .02$). The adjusted model also revealed that an increased body mass index was associated with an increased incidence of acne (OR, 1.18; 95% CI, 1.04-1.33; $P = .01$) and that this risk was further increased by a positive current smoking status (OR, 5.51; 95% CI, 1.02-29.77; $P < .05$) (as seen in Table I).

Several existing studies have shown that transgender men experience increased sebum production and acne with testosterone therapy.[3,5] The virilization effects of testosterone in transgender men, both systemic and dermatologic, are somewhat variable in intensity and timing after the initiation of testosterone therapy.[4] Additionally, individual goals for testosterone therapy range from maximum virilization to suppression of feminizing secondary sex characteristics only.[5] Nakamura et al reported that during the first 6 months only, the most commonly desired virilization effects were dose dependent.[4] If a transgender man begins to develop acne, it may be possible to personalize his testosterone therapy depending on transition goals, priorities, risk factors, and other comorbidities.

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Funding sources: Supported by the Medical Student Summer Research Program at Boston University School of Medicine.